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Jari Takala

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EXAMINER

EVANS, KIMBERLY L

ART UNIT

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3629

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                                      |                                     |  |
|------------------------------|--------------------------------------|-------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/617,751 | <b>Applicant(s)</b><br>TAKALA, JARI |  |
|                              | <b>Examiner</b><br>KIMBERLY EVANS    | <b>Art Unit</b><br>3629             |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 September 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,4-9,12-18,21-23,26-32 and 35-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 4-9, 12-18, 21-23, 26-32, and 35-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)         | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### **Status of Claims**

1. This action is in reply to the response filed on September 9, 2009.
2. Claims 7, 9, 14, 15, 23, 28, 30, 32, 37, and 38 have been amended.
3. Claims 2, 3, 10, 11, 19, 20, 24, 25, 33, and 34 have been cancelled.
4. Claims 1, 4-9, 12-18, 21-23, 26-32, and 35-38 are currently pending and have been examined.

### **Claim Rejections - 35 USC § 103**

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
  - Determining the scope and contents of the prior art.
  - Ascertaining the differences between the prior art and the claims at issue.
  - Resolving the level of ordinary skill in the pertinent art.
  - Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 1, 4-9, 12-18, 21-23, 26-32, and 35-38 are rejected under 35 USC 103(a) as being unpatentable over Ephraim et al., US Patent Application Publication No US 2004/0077332 A1 in view of Myatt et al., WO 03/0258780 A2, Real-Time Reservation of Charges for Pre-Paid Services.
8. With respect to Claim 1, 9, 14, 16, 17, 23, 25, 28, 30, 32, 34, 37, and 38, Ephraim discloses the following limitations,
- *reserving resources from a prepayment system for prepaid data services* (see at least Abstract: "...A system (FIG. 1) and method for providing prepaid data transfer services to a subscriber (12) through a communication device, such as a wireless or wireline device..."), *the prepaid data services being divided into at least two service groups of different charging criteria in a network*(see at least paragraph 57: "...In this preferred embodiment, prepaid server 34 distributes tokens to both data monitor 38 and voice network 36, such that both types of services can optionally be operated on a prepaid basis. ..."), *wherein an initial data delivery limit is set for each service group based on the resources and information about the charging criteria* (see at least paragraph 29: "...A prepaid system monitors the data network in order to determine whether a particular requested data transfer service should be authorized, for example, according to the amount available in the account of the subscriber..")
  - *directing sending of a message containing information about the initial data delivery limits from a rating device to a measuring device, wherein a proportional data delivery limits are limit is allocated for each service group individually;*(see at least paragraph 39: "...As shown, prepaid server 34 communicates with data monitor 38 (optionally through Data Payment Server 32) in order to be able to determine the type of data transfer services which are being provided from Internet 24 and/or another external network. Data monitor 38 monitors all data traffic from Internet 24 and/or another external network, and reports on a number of characteristics of such traffic to prepaid server 34...")

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- *and the proportional data delivery limit for each service group is defined as a proportion of the initial data delivery limit for the respective service group,( see at least paragraph 12: "...According to preferred embodiments of the present invention, the calculation of the debit is divided into two parts...."; see at least paragraph 52: "...Data monitor 38 is preferably responsible for finding the exact rule which matches the data being monitored, and then to calculate a charge for the data transfer..")*

Ephraim does not distinctly disclose the following limitations, but Myatt however as shown discloses,

- *wherein remaining resources to the service groups are reallocated based on a pricing weight of each of the service groups (see at least page 16: "... the systems and methods of the present invention provide a mechanism to determine an appropriate reservation amount that does not result complete exhaustion of the user's pre-paid account thereby leaving credit in the account to use for other services that may be concurrently accessed. .. a user with a pre-paid account that desires to make voice calls while simultaneously accessing a content server earl do so without worrying that the entire pre-paid account will be allocated to one service ..."): each pricing weight being defined for the respective service group as a proportion of a sum of the proportional data delivery limits to the initial data delivery limit of the service group (see at least page 16: "... the event can be a content download and the service units can be tokens, messages, arid byte quantities. ..."), to obtain a new proportional data delivery limit for each service group individually, (see at least page 16: "... to determine an appropriate reservation amount that does not result complete exhaustion of the user's pre-paid account thereby leaving credit in the account to use for other services that may be concurrently accessed...") the new proportional data delivery limits being for use in delivery of data after at least one of the service groups has exceeded its proportional data delivery limit.(see at least page 15: "...the rating function or rating engine is then called with the new duration to determine a new reservation amount. In addition, in those embodiments maintaining a loop counter, Rate Return Count is incremented. the method then returns to*

decision block 3 ! 2 to re-execute the loop with the newly calculated reservation amount and duration....")

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the management of prepaid billing system for wireless communications with the computerized reservation system of Myatt because it is an efficient means for balancing and calculating a reservation amount based on the event data and the pre-paid account balance.

9. With respect to Claim 4,

Ephraim and Myatt disclose all of the above limitations, Ephraim further discloses,

- *comprising receiving a report from the measuring device at the rating device only after all of the reserved resources are used.* (see at least paragraph 15: "...The prepaid system preferably allows packets to be transferred between the wireless device and the data service provider (server) only if the subscriber's account balance is sufficient and/or if the packets are "free". Optionally and more preferably, the system notifies the subscriber when the subscriber's balance is low or exhausted, for example via an SMS message or an HDML message sent to the wireless device. Alternatively, the prepaid system can optionally notify the subscriber by sending a message containing a pointer (for example a "recharge URL") to a page that contains such a message...")

10. With respect to Claim 5, 13, 18, 22, 27, 29, and 36,

Ephraim and Myatt disclose all of the above limitations, Ephraim further discloses,

- *wherein the initial data delivery limit is defined as a volume equivalent to a same amount of money for each service group.* (see at least paragraph 12: "...According to preferred embodiments of the present invention, the calculation of the debit is divided into two parts....")

11. With respect to Claims 6, 7, and 15,

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Ephraim and Myatt disclose all of the above limitations, Ephraim further discloses,

- *a prepayment system hosting prepaid resources; (see at least Abstract: "...A system (FIG. 1) and method for providing prepaid data transfer services to a subscriber (12) through a communication device, such as a wireless or wireline device...")*
- *a rating device configured to receive information of the prepaid resources and of charging criteria of service groups and to set initial data delivery limits for the service groups based on the received information; and;(see at least paragraph 39: "...As shown, prepaid server 34 communicates with data monitor 38 (optionally through Data Payment Server 32) in order to be able to determine the type of data transfer services which are being provided from Internet 24 and/or another external network. Data monitor 38 monitors all data traffic from Internet 24 and/or another external network, and reports on a number of characteristics of such traffic to prepaid server 34...")*
- *a measuring device configured to allocate a proportional data delivery limit for each service group individually, wherein each proportional data delivery limit is defined as a proportion of the initial data delivery limit for the respective service group,(see at least paragraph 65: "...the mechanism and/or system used can be as explained earlier but the amount measured and exchanged will be bytes or service data and not tokens or money. It should be further noted that in some cases the two unused amounts (i.e. data and time) can be returned to the prepaid system and the system will measure the minimum of the two options...")*

Ephraim does not distinctly disclose the following limitations, but Myatt however as shown discloses,

- *to measure use of each of the service groups, and to reallocate remaining free resources to the service groups based on a pricing weight of each of the service groups (see at least page 16: "... the systems and methods of the present invention provide a mechanism to determine an appropriate reservation amount that does not result complete exhaustion of the user's pre-paid account thereby leaving credit in the account to use for other services that may be concurrently accessed. .. a user with a pre-paid account that desires to make voice calls*

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while simultaneously accessing a content server earl do so without worrying that the entire pre-paid account will be allocated to one service ..."); *each pricing weight being defined for the respective service group as a proportion of a sum of the proportional data delivery limits to the initial data delivery limit of the service group*, (see at least page 16: "... the event can be a content download and the service units can be tokens, messages, arid byte quantities. ..."), *to obtain a new proportional data delivery limit for each service group individually for delivery of data when a one of the groups exceeds its proportional data delivery limit*. (see at least page 16: "... to determine an appropriate reservation amount that does not result complete exhaustion of the user's pre-paid account thereby leaving credit in the account to use for other services that may be concurrently accessed...")

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the management of prepaid billing system for wireless communications with the computerized reservation system of Myatt because it is an efficient means for balancing and calculating a reservation amount based on the event data and the pre-paid account balance.

12. With respect to Claim 8,

Ephraim, and Myatt disclose all of the above limitations, Ephraim further discloses,

- *wherein the at least one data communication network comprises a packet core communication network for communication of data between users and the measuring device and a public data network for communication of data between the measuring device and providers of the prepaid services.*(see at least paragraph 11: "...the subscriber uses a wireless device, such as a cellular telephone for example, to access data services, such as SMS or the Internet. The request for access is intercepted by the prepaid billing system of the present invention, which is preferably connected between the external network and a GGSN, or other gateway, which resides between the external network (such as the Internet) and the internal data network (such as an internal GPRS packet network)...")



13. With respect to Claims 12,

Ephraim, and Myatt disclose all of the above limitations, Ephraim further discloses,

- *wherein the measuring device is further configured to send a report to the rating device only after all of the reserved resources are used.*(see at least paragraph 15: "...The prepaid system preferably allows packets to be transferred between the wireless device and the data service provider (server) only if the subscriber's account balance is sufficient and/or if the packets are "free". Optionally and more preferably, the system notifies the subscriber when the subscriber's balance is low or exhausted, for example via an SMS message or an HDML message sent to the wireless device. Alternatively, the prepaid system can optionally notify the subscriber by sending a message containing a pointer (for example a "recharge URL") to a page that contains such a message. ...")

14. With respect to Claim 21, 26, and 35,

Ephraim, and Myatt disclose all of the above limitations, Ephraim further discloses,

- *after all of the reserved resources are used, a report is sent from the apparatus to a rating device configured to obtain information of the prepaid resources* (see at least paragraph 39: "...Data monitor 38 monitors all data traffic from Internet 24 and/or another external network, and reports on a number of characteristics of such traffic to prepaid server 34. Such characteristics include, but are not limited to, the type of data being transferred and/or the type of data which is requested to be transferred, the amount of data being transferred and the identity of the subscriber (or wireless device 12) for which the data is being transferred..")
- *and of the charging criteria of service groups and to set the initial data delivery limits for the service groups based on the obtained information.*(see at least paragraph 39: "...Music data might optionally be charged at a lower rate than other kinds of data packets. Packets with error messages might be free. Thus, data monitor 38 more preferably calculates the charge for the data transfer according to an arbitrary internal unit, which is described in greater detail

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below as a "token", which most preferably does not require any information about one or more characteristics of the subscriber...")

### **Conclusion**

15. Any inquiry of a general nature or relating to the status of this application or concerning this communication or earlier communications from the Examiner should be directed to **Kimberly L. Evans** whose telephone number is **571.270.3929**. The Examiner can normally be reached on Monday-Friday, 9:30am-5:00pm. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, **John Weiss** can be reached at **571.272.6812**.

16. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://portal.uspto.gov/external/portal/pair> <<http://pair-direct.uspto.gov>>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at **866.217.9197** (toll-free). Any response to this action should be mailed to: **Commissioner of Patents and Trademarks**, P.O. Box 1450, Alexandria, VA 22313-1450 or faxed to **571-273-8300**. Hand delivered responses should be brought to the **United States Patent and Trademark Office Customer Service Window**: Randolph Building 401 Dulany Street, Alexandria, VA 22314.

/KIMBERLY EVANS/Examiner, Art Unit 3629

/JOHN G. WEISS/

Supervisory Patent Examiner, Art Unit 3629

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